Clarion Co., Ltd.
7-2, Shintoshin, Chuo-ku, Saitama-shi, Saitama 330-0081 Japan
Service Dept.: 7-2, Shintoshin, Chuo-ku, Saitama-shi, Saitama 330-0081 Japan
Tel: +81-48-601-3705 FAX: +81-48-601-3804

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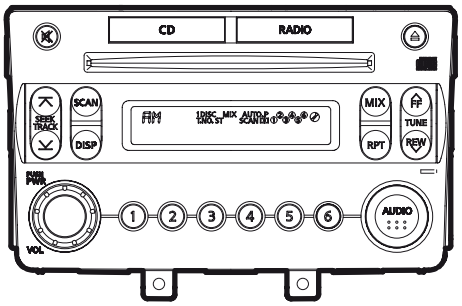
Service Manual



NISSAN Automobile Genuine
AM/FM Radio CD Stereo

Model PP-2515L-I
(Genuine No. 28185 CF40B)
(ID No. CY51D)

SPECIFICATIONS

Radio section

Tuning system:	PLL frequency synthesizer system
Receive range:	AM 530kHz to 1710kHz
	FM 87.9MHz to 107.9MHz
Intermediate frequency:	
	AM 450kHz
	FM 10.7MHz
Quieting sensitivity:	AM Less than 38dBu(at 20dB S/N)
	FM Less than 15dBu(at 30dB S/N)
Separation:	FM 22+5/-7dB(1kHz)
Auto tuning stop sensitivity:	
	AM 42+6/-6dBu(600kHz)
	39+6/-6dBu(1000/1400kHz)
	FM 32+6/-6dBu

CD section

Disc:	12cm,8cm Disc
Separation:	More than 50dB(20kHz LPF)
S/N ratio:	More than 74dB

AUX(CD) section

Separation:	More than 52dB(1kHz,3.0V input)
S/N ration:	More than 74dB(1kHz,3.0V input)
CMRR:	More than 40dB(1kHz,3.0V input)

General

Load impedance:	4 ohm
Power output:	40Wx4
Power supply voltage:	DC13.2V(10.8V to 15.6V)
	Negative ground
Back-up consumption:	Less than 3mA
Dimensions(mm):	180(W) x 108(H) x 157.1(D)

COMPONENTS

PP-2515L-I

Main unit	----------	1

To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.
   The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.
   The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.
2. Place the parts and wiring back in their original positions after replacement or re-wiring.
   For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.
   If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair.
   Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary ploblems around the repaired spots.
   If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
4. Caution in removal and making wiring connection to the parts for the automobile.
   Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.
5. Cautions in soldering
   Please do not spread liquid flux in soldering.
   Please do not wash the soldering point after soldering.
6. Cautions in soldering for chip capacitors
   Please solder the chip capacitors after pre-heating for replacement because they are very weak to heat.
   Please do not heat the chip capacitors with a soldering iron directly.
7. Cautions in handling for chip parts.
   Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc).
   Please make an operation test after replacement.
8. Cautions in handling flexible PWB
   Before working with a soldering iron, make sure that the iron tip temperature is around 270℃. Take care not to apply the iron tip repeatedly(more than three times)to the same patterns. Also take care not to apply the tip with force.
9. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.
10. Cautions in checking that the optical pickup lights up.
    The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.
11. Cautions in handling the optical pickup
    The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

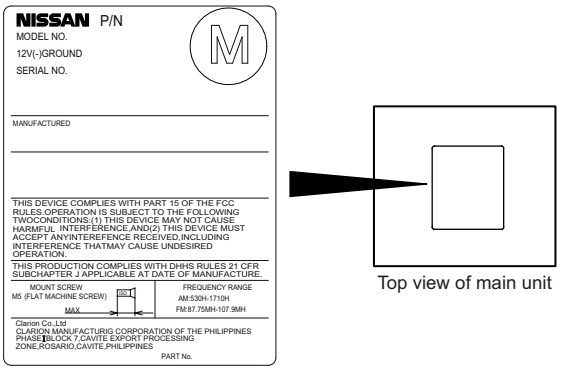
11-1. Laser diode
The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

11-2. Actuator
The actuator has a powerful magnetic circuit. If a magnetic material is put close to it. Its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

11-3. Cleaning the lens
Dust on the optical lens affects performance.
To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

NOTE

We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.


NISSAN P/N
MODEL NO.
12V(-)GROUND
SERIAL NO.
M
MANUFACTURED
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.OPERATION IS SUBJECT TO THE FOLLOWING TWOCONDITIONS:(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE,AND(2) THIS DEVICE MUST ACCEPT ANYINTEREFENCE RECEIVED,INCLUDING INTERFERENCE THATMAY CAUSE UNDESIRED OPERATION.
THIS PRODUCTION COMPLIES WITH DHHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT DATE OF MANUFACTURE.
MOUNT SCREW
M5 (FLAT MACHINE SCREW)
MAX
FREQUENCY RANGE
AM:530H-1710H
FM:87.75MH-107.9MH
Clarion Co.,Ltd
CLARION MANUFACTURIG CORPORATION,OF THE PHILIPPINES PHASEIBLOCK 7,CAVITE EXPORT PROCESSING ZONE,ROSARIO,CAVITE,PHILIPPINES
PART No.

Top view of main unit

CAUTIONS

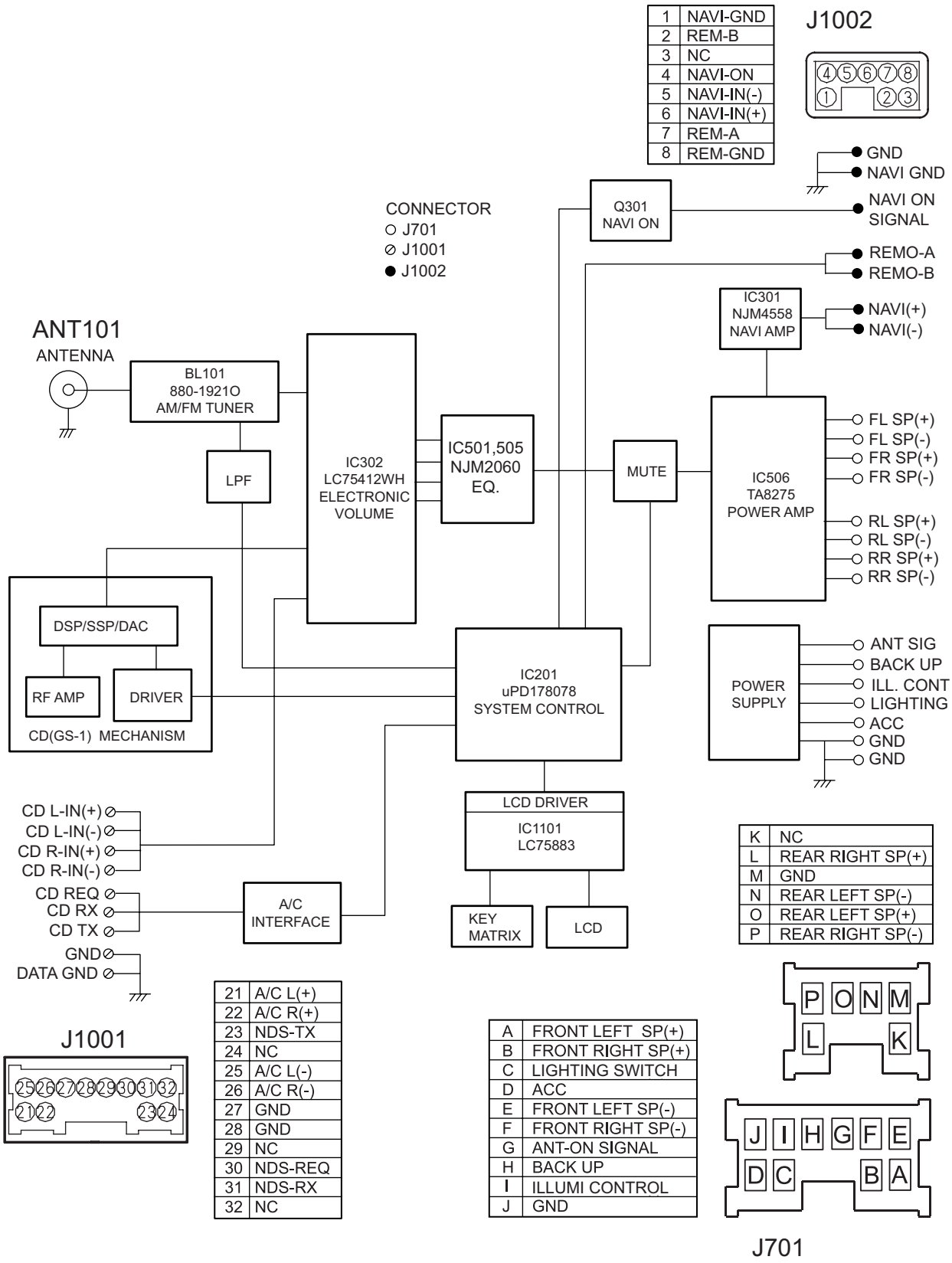
* Use of controls,adjustment,or performance of procedures other than those specified herein,may result in hazardous radiation exposure.
  The compact disc player should not be adjusted or repaired by anyone except properly qualified service personnel.
* Specifications and design are subject to change without notice for further improvement.

ADJUSTMENT

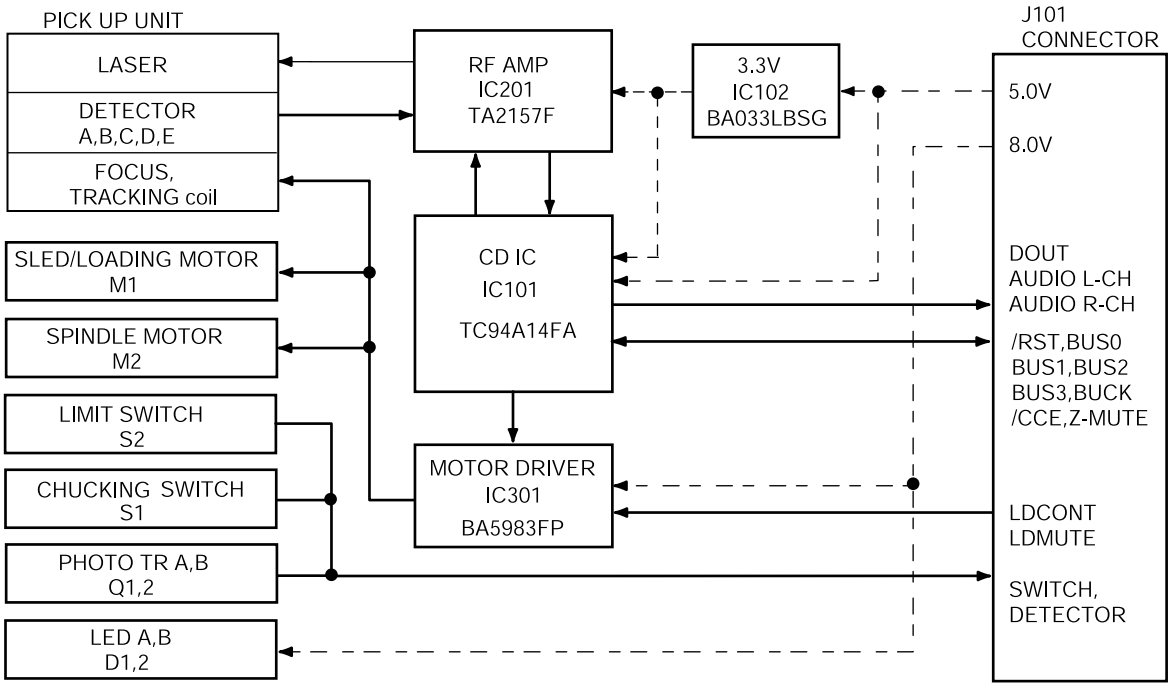
Item	Procedure	Measuring instrument
Clock accuracy	1. Turn off and on the ACC switch, while holding CD-EJECT button and Power button. Repeat it twice slowly. 2. Set a universal counter to TP201,adjust TC201 so that a reading of the counter is 0+0.1/-0.1 sec./day.	Universal counter
FM noise convergence	1. Input the 98.1MHz/55dBu(1kHz,30% MOD)signal.(VOL1.4V=0dB) 2. Adjust the outputs to -22+3/-3dB by VR102 when the SG output is set -20dBu.	SSG Milli-volt meter

BLOCK DIAGRAM

Main section



CD mechanism section 929-5007-80

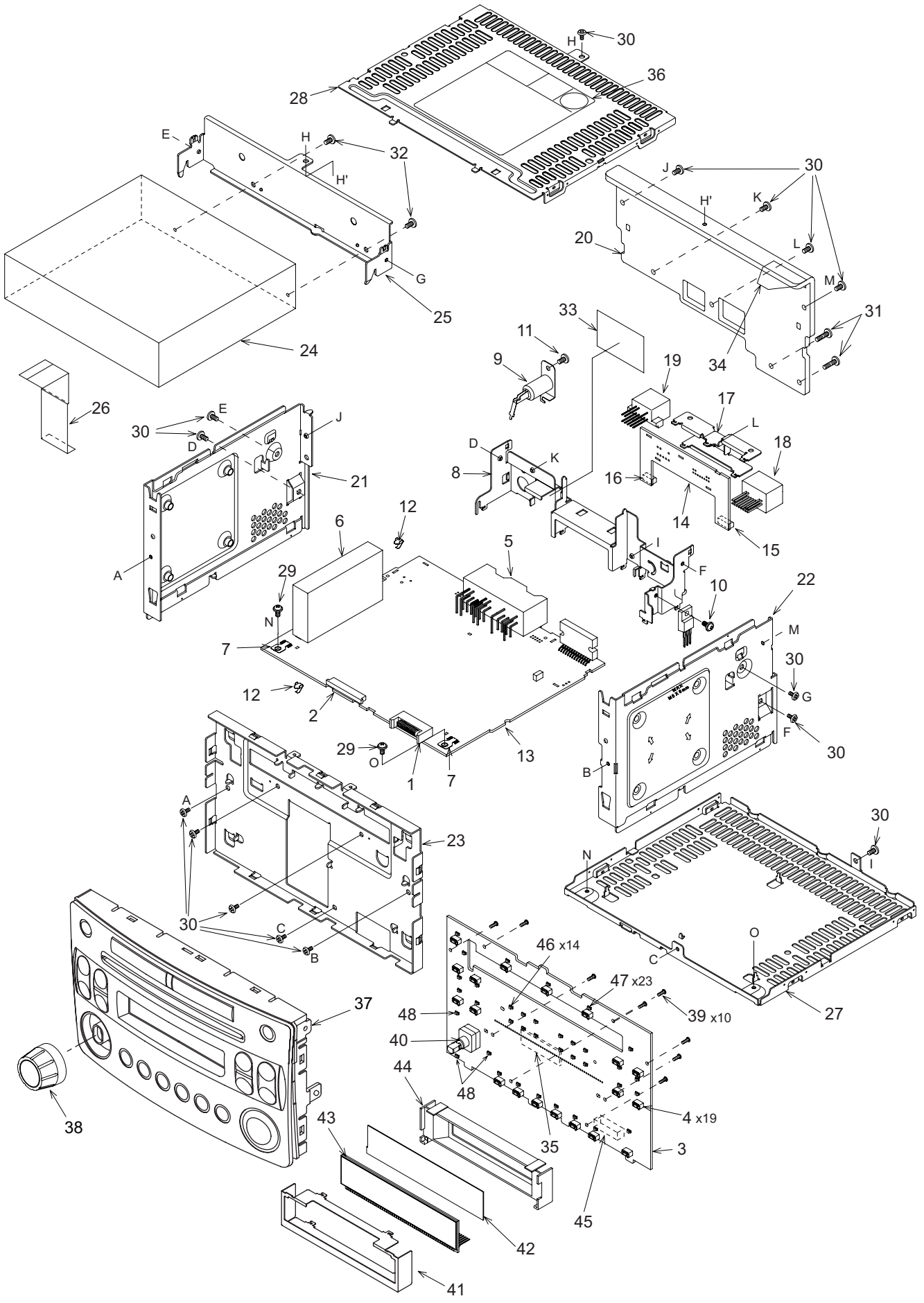


EXPLODED VIEW/PARTS LIST

Main section

NO.	PART NO.	DESCRIPTION	Q'TY
1	076-0540-14	PLUG(14P)	1
2	074-1191-26	OUTLET SOCKET(26P)	1
3	----------	SWITCH PWB	1
4	013-6311-50	SWITCH	19
5	074-1068-11	OUTLET SOCKET	1
6	880-1921O	FM/AM TUNER	1
7	073-0762-90	TERMINAL	2
8	307-0683-00	REAR PLATE	1
9	092-0702-00	ANT-RECEPTACLE	1
10	716-0878-50	IT-SCREW	1
11	714-2606-8B	MACHINE SCREW(M2.6x6)	1
12	073-0774-00	TERMINAL	2
13	----------	MAIN PWB	1
14	----------	SUB PWB	1
15	076-0544-10	PLUG(10P)	1
16	076-0544-08	PLUG(8P)	1
17	331-3522-01	OUTLET HOLDER	1
18	074-1013-30	OUTLET SOCKET(12P)	1
19	074-1298-10	OUTLET SOCKET(8P)	1
20	313-1857-03	HEAT SINK	1
21	331-3471-81	SIDE PLATE	1
22	331-3472-81	SIDE PLATE	1
23	331-3467-03	ES-PLATE	1
24	929-5007-80	CD MECHANISM	1

NO.	PART NO.	DESCRIPTION	Q'TY
25	331-3466-81	MECH BRKT	1
26	816-2549-01	FLAT WIRE	1
27	311-1833-00	LOWER CASE	1
28	310-1739-00	UPPER CASE	1
29	716-0878-50	IT-SCREW	2
30	714-2606-8B	MACHINE SCREW(M2.6x6)	15
31	714-2612-8B	MACHINE SCREW(M2.6x12)	2
32	714-2603-89	MACHINE SCREW(M2.6x3)	2
33	347-5206-01	SHIELD SHEET	1
34	347-6521-11	SHIELD SHEET	1
35	345-8639-01	PROTECTOR	1
36	286-6645-08	SETPLATE	1
37	940-8107-07	ESCUTCHEON ASSY	1
38	380-5567-02	KNOB	1
39	716-0778-50	WAVE SCREW	10
40	016-0013-04	ROTARY ENCODER	1
41	331-4088-00	LCD COVER	1
42	335-7730-01	LED LEFLECTOR	1
43	379-1341-31	LCD	1
44	335-6804-81	LCD HOLDER	1
45	074-3012-64	OUTLET SOCKET(14P)	1
46	001-7080-91	LED(YEL)	14
47	001-7063-96	LED(YEL)	23
48	001-7093-90	LED(YEL)	3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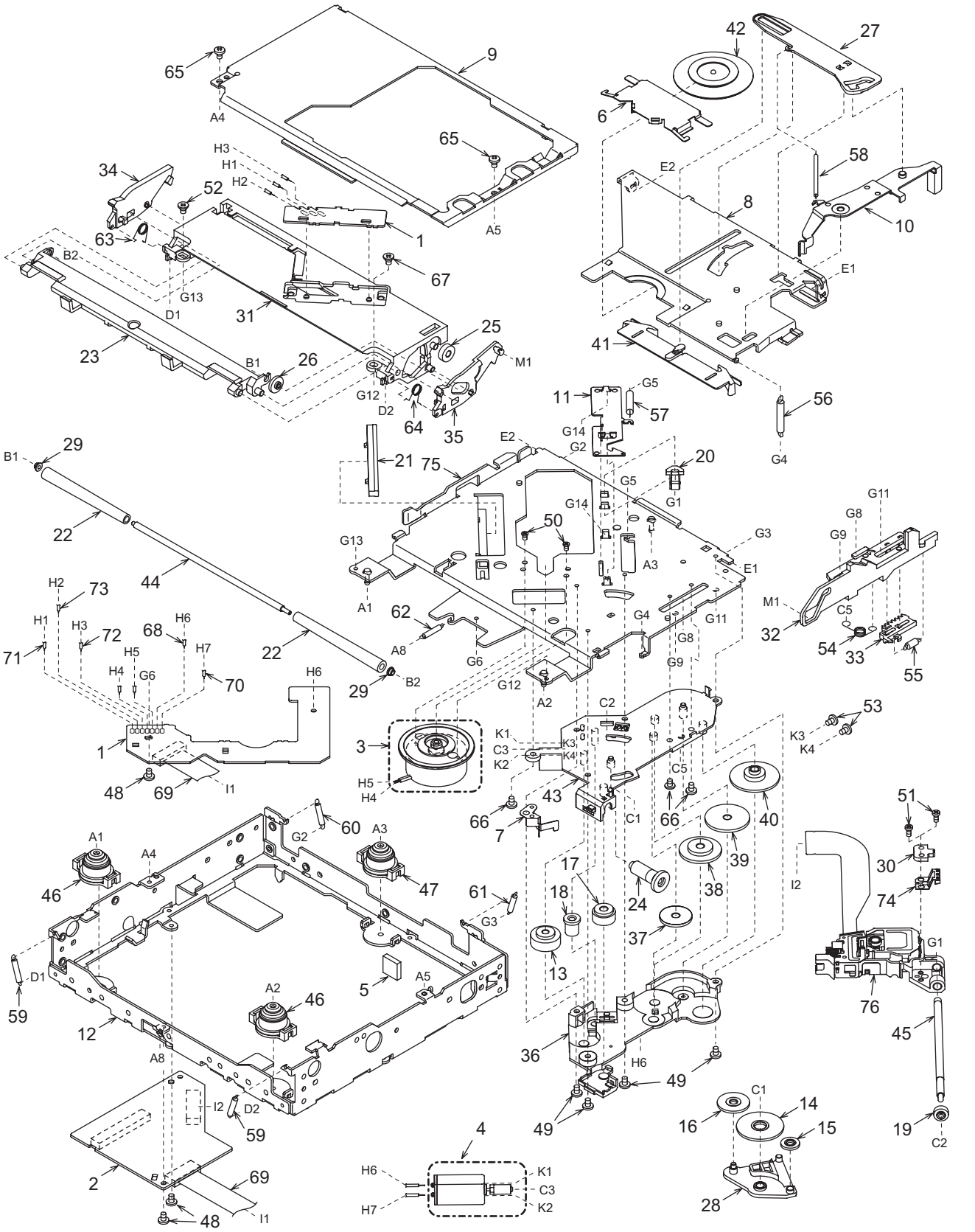
PP-2515L-I

CD mechanism section 929-5007-80



NO.	PART NO.	DESCRIPTION	Q'TY
1	----------	SENSOR PWB	1
2	----------	MAIN PWB	1
3	SMA-182-100	SPINDLE MOTOR-ASSY	1
4	SMA-183-100	SLED MOTOR-ASSY	1
5	345-5476-20	CUSHION RUBBER	1

NO.	PART NO.	DESCRIPTION	Q'TY
6	620-1023-23	CLAMPER PLATE	1
7	620-1026-21	SPRING PLATE	1
8	620-1596-23	CLAMPER LINK	1
9	620-1598-22	UPPER CHASSIS	1
10	620-1752-20	SENSOR ARM	1

NO.	PART NO.	DESCRIPTION	Q'TY
11	620-1753-20	ID-LOCK PLATE	1
12	620-1754-20	LOWER CHASSIS	1
13	621-0608-21	SECOND GEAR	1
14	621-0609-20	BASE GEAR	1
15	621-0610-20	IDLE GEAR A	1
16	621-0611-20	IDLE GEAR B	1
17	621-0612-21	ROLLER GEAR A	1
18	621-0620-20	THREAD GEAR A	1
19	621-0621-20	THREAD GEAR B	1
20	621-0623-23	LS-HOLDER	1
21	621-0624-22	GUIDE RAIL	1
22	621-0711-21	LOADING ROLLER	2
23	621-0718-21	ROLLER GUIDE	1
24	621-0719-20	ROLLER GEAR B	1
25	621-0720-20	ROLLER GEAR C	1
26	621-0721-20	ROLLER GEAR D	1
27	621-0728-20	STOPPER LINK	1
28	621-1719-20	IDLE CASE	1
29	621-1726-20	ROLLER SLEEVE	2
30	621-1729-20	SH-BASE	1
31	621-1742-20	UPPER GUIDE	1
32	621-1743-20	SHIFT LEVER	1
33	621-1744-20	RACK	1
34	621-1745-20	LOCK ARM L	1
35	621-1746-20	LOCK ARM R	1
36	621-1747-20	GEAR COVER	1
37	621-1748-20	POWER GEAR A	1
38	621-1749-20	POWER GEAR B	1
39	621-1750-20	POWER GEAR C	1
40	621-1751-20	POWER GEAR D	1
41	621-1752-20	DISC STOPPER	1
42	621-1753-20	CLAMPER RING	1
43	621-1754-20	GEAR BASE	1

NO.	PART NO.	DESCRIPTION	Q'TY
44	622-1571-21	ROLLER SHAFT	1
45	624-0020-00	LEAD SCREW	1
46	629-0086-20	DAMPER F	2
47	629-0087-20	DAMPER R	1
48	716-1507-01	SCREW(M2x3)	3
49	716-1670-01	SCREW(M2x4)	4
50	716-1733-01	SCREW(M1.7x2.3)	2
51	716-3469-01	SCREW(1.7x4)	2
52	716-3473-01	SCREW(M2x3)	1
53	716-3551-00	SCREW(M1.4x2.5)	2
54	750-7865-20	SHIFT SPRING	1
55	750-7866-20	RACK SPRING	1
56	750-7867-20	CLAMPER SPRING	1
57	750-7868-20	ID-LOCK SPRING	1
58	750-7869-20	SENSOR SPRING	1
59	750-7870-20	DR-SPRING F	2
60	750-7871-20	DR-SPRING RA	1
61	750-7872-20	DR-SPRING RB	1
62	750-7873-20	DR-SPRING C	1
63	750-6797-20	ROLLER SPRING L	1
64	750-6798-20	ROLLER SPRING R	1
65	714-2003-8B	SCREW(M2x3)	2
66	780-2025-00	SCREW(M2x2.5)	3
67	781-1730-00	SCREW(M1.7x3)	1
68	803-4906-60	VINYL-COAT-WIRE(ORG)	1
69	816-2542-01	FLAT WIRE	1
70	816-2590-00	VINYL-COAT-WIRE(GRN)	1
71	816-2591-00	VINYL-COAT-WIRE(YEL)	1
72	816-2592-00	VINYL-COAT-WIRE(BLUE)	1
73	816-2593-00	VINYL-COAT-WIRE(PUR)	1
74	966-1722-20	SH-RACK-ASSY	1
75	966-1743-21	DRIVE-PLT-ASSY	1
76	969-0071-30	PICKUP-ASSY	1

■ELECTRICAL PARTS LIST

Main PWB(B1) section

Note) Several different parts of the same reference number are alternative parts. One of those parts is used in the set.

REF No.	PART No.	DESCRIPTION
ANT101	092-0702-00	ANT RECEP.
BL101	880-1921O	FM/AM TUNER
C104	119-0000-05	1/10W 0 ohm JW
C105	166-1511-50	150pF CH
C114	166-1007-50	10pF CH
C116	168-1042-78	16V 0.1uF
C118	168-1022-55	1000pF K
C119	187-1073-27	10V 100uF
C120	042-1458-93	50V 2.2uF
C122	187-1073-27	10V 100uF
C123	187-1073-27	10V 100uF
C125	187-4763-37	16V 47uF
C126	178-1052-78	1uF
C127	168-1532-55	0.015uF K
C128	168-3932-78	0.039uF K
C129	168-3932-78	0.039uF K
C130	166-1201-50	12pF CH
C132	166-2201-50	22pF CH
C133	166-1501-50	15pF CH

REF No.	PART No.	DESCRIPTION
C134	168-1022-55	1000pF K
C135	168-1042-78	16V 0.1uF
C136	168-1042-78	16V 0.1uF
C137	168-1042-78	16V 0.1uF
C138	168-1042-78	16V 0.1uF
C139	166-5601-50	56pF CH
C201	168-1022-55	1000pF K
C202	168-1022-55	1000pF K
C203	166-1011-50	100pF CH
C204	166-1011-50	100pF CH
C205	166-1011-50	100pF CH
C206	166-1011-50	100pF CH
C207	168-1042-78	16V 0.1uF
C208	168-1042-78	16V 0.1uF
C212	166-8097-50	8pF C CH
C213	188-4763-38	16V 47uF
C214	168-1042-78	16V 0.1uF
C215	188-4763-38	16V 47uF
C216	168-1042-78	16V 0.1uF

REF No.	PART No.	DESCRIPTION
C217	042-0403-55	16V 33uF
C218	042-0403-55	16V 33uF
C219	168-1042-78	16V 0.1uF
C230	166-4711-50	470pF CH
C301	168-4722-55	4700pF K
C302	168-1042-78	16V 0.1uF
C303	187-4763-37	16V 47uF
C304	166-1011-50	100pF CH
C305	119-0000-05	1/10W 0 ohm JW
C306	189-2273-29	10V 220uF
C307	187-1063-37	16V 10uF
C308	166-1011-50	100pF CH
C309	188-1066-38	16V 10uF NP
C310	188-1066-38	16V 10uF NP
C315	187-2263-37	16V 22uF
C316	187-1053-67	50V 1uF
C318	178-1042-78	0.1uF
C319	178-1042-78	0.1uF
C321	187-1053-67	50V 1uF

REF No.	PART No.	DESCRIPTION
C322	178-4742-78	0.47uF
C323	178-4742-78	0.47uF
C324	168-1222-55	1200pF K
C325	187-1053-67	50V 1uF
C326	187-1053-67	50V 1uF
C327	168-1222-55	1200pF K
C332	178-1842-78	0.18uF
C333	178-1842-78	0.18uF
C334	178-1842-78	0.18uF
C335	178-1842-78	0.18uF
C336	168-8212-55	820pF K
C337	168-8212-55	820pF K
C338	168-8212-55	820pF K
C339	168-8212-55	820pF K
C340	187-1063-37	16V 10uF
C341	187-1063-37	16V 10uF
C342	168-1832-55	0.018uF K
C343	187-1063-37	16V 10uF
C344	187-1063-37	16V 10uF
C345	187-1063-37	16V 10uF
C346	187-1063-37	16V 10uF
C405	168-1022-55	1000pF K
C406	168-1022-55	1000pF K
C407	168-1022-55	1000pF K
C408	168-2232-55	0.022uF K
C409	187-1063-37	16V 10uF
C410	187-1063-37	16V 10uF
C411	187-1063-37	16V 10uF
C412	187-1063-37	16V 10uF
C501	168-5622-55	5600pF K
C502	168-1532-55	0.015uF K
C503	168-5622-55	5600pF K
C504	168-1532-55	0.015uF K
C505	166-2201-50	22pF CH
C506	166-2201-50	22pF CH
C508	166-2201-50	22pF CH
C509	166-2201-50	22pF CH
C510	168-5632-78	16V 0.056uF
C511	168-5632-78	16V 0.056uF
C512	166-2201-50	22pF CH
C513	166-2201-50	22pF CH
C515	166-2201-50	22pF CH
C516	166-2201-50	22pF CH
C517	168-1042-38	50V 0.1uF
C553	178-1042-78	0.1uF
C554	178-1042-78	0.1uF
C555	178-6832-78	0.068uF
C556	178-6832-78	0.068uF
C557	178-1042-78	0.1uF
C558	178-6832-78	0.068uF
C559	166-2201-50	22pF CH
C560	166-2201-50	22pF CH
C561	166-2201-50	22pF CH
C562	166-2201-50	22pF CH
C563	178-1042-78	0.1uF
C564	178-6832-78	0.068uF
C565	168-1032-55	0.01uF K
C566	168-2232-55	0.022uF K
C567	168-1032-55	0.01uF K
C568	178-3932-78	0.039uF
C569	178-3932-78	0.039uF
C570	178-3932-78	0.039uF
C571	178-3932-78	0.039uF
C572	168-3322-55	3300pF K
C573	187-1053-67	50V 1uF
C574	187-1063-37	16V 10uF
C577	178-1052-78	1uF
C578	178-1052-78	1uF
C579	178-1052-78	1uF
C580	178-1052-78	1uF
C581	168-3322-55	3300pF K
C582	188-1053-68	50V 1uF
C584	166-2201-50	22pF CH
C585	166-2201-50	22pF CH

REF No.	PART No.	DESCRIPTION
C586	166-2201-50	22pF CH
C587	166-2201-50	22pF CH
C599	189-4773-19	6.3V 470uF
C601	188-4753-68	50V 4.7uF
C602	188-4753-68	50V 4.7uF
C701	172-1041-15	0.1uF
C702	042-1447-00	16V2200uF
C703	168-2222-55	2200pF K
C704	168-2222-55	2200pF K
C705	168-2222-55	2200pF K
C706	168-2222-55	2200pF K
C707	168-2222-55	2200pF K
C708	168-2222-55	2200pF K
C709	168-2222-55	2200pF K
C710	168-2222-55	2200pF K
C711	168-2222-55	2200pF K
C712	172-1041-15	0.1uF
C713	187-1053-67	50V 1uF
C714	188-6843-68	50V 0.68uF
C802	187-4763-37	16V 47uF
C803	187-1063-37	16V 10uF
C804	168-1042-78	16V 0.1uF
C805	168-1042-78	16V 0.1uF
C806	187-1063-37	16V 10uF
C807	187-1063-37	16V 10uF
C808	189-1073-39	16V 100uF
C809	168-1042-78	16V 0.1uF
C810	163-1063-35	16V 10uF
C811	042-0416-57	10V 47uF M TAN
C901	168-1042-78	16V 0.1uF
C902	187-1063-37	16V 10uF
C903	188-4753-68	50V 4.7uF
C904	188-1053-68	50V 1uF
C905	166-4711-50	470pF CH
C906	166-4711-50	470pF CH
C907	168-1042-38	50V 0.1uF
C910	166-1021-50	1000pF CH
C911	187-1073-37	16V 100uF
CCT205	050-0140-54	1/32W 1k ohm x4J
CCT206	050-0140-54	1/32W 1k ohm x4J
CCT207	050-0140-54	1/32W 1k ohm x4J
CCT209	050-0140-54	1/32W 1k ohm x4J
CCT210	050-0140-54	1/32W 1k ohm x4J
D401	001-0422-38	MTZJ36
D402	001-0330-90	1SS119
D403	001-0330-90	1SS119
D404	001-0347-44	MA4082M
D601	001-0516-90	MA111
D701	001-2015-00	RL253
D702	001-0466-90	S5688B
D703	001-0347-34	MA4062L
D704	001-0466-90	S5688B
D802	001-0347-48	MA4091H
D803	001-0516-90	MA111
D804	001-0466-90	S5688B
D805	001-0516-90	MA111
D806	001-0504-31	HZS6 A2L
D808	001-0504-45	HZS9 B1L
D902	001-0504-48	HZS9 C2L
D903	001-0516-90	MA111
IC201	052-1173-50	UPD178078GF-715-3BAA
IC301	051-3034-90	NJM4558V
IC302	051-5027-00	LC75412WH
IC501	051-3019-90	NJM2060V
IC505	051-3019-90	NJM2060V
IC506	051-2042-00	TA8275H
IC801	051-3341-90	BD3931FP
J201	074-1191-26	26P
J701	074-1068-11	NS10+6
L104	010-2003-04	COIL
L202	010-6009-64	2.2uH
L701	009-0670-01	CHOKE
L701	009-0670-81	CHOKE

REF No.	PART No.	DESCRIPTION
P701	076-0540-14	14P
Q104	192-2458-51	2SC2458 GR.BL
Q105	192-2458-51	2SC2458 GR.BL
Q106	190-1150-00	2SA1150
Q107	125-2004-92	RN1402
Q108	190-1150-00	2SA1150
Q201	125-2004-92	RN1402
Q301	125-2004-92	RN1402
Q302	125-2004-92	RN1402
Q303	191-0709-00	2SB709A Q,R,S
Q401	192-2712-00	2SC2712
Q402	125-9006-90	IMX1
Q403	125-2004-92	RN1402
Q404	125-0002-92	RN2402
Q501	125-4001-90	XN1504
Q502	125-4001-90	XN1504
Q503	125-0006-90	UN2110
Q504	125-0002-92	RN2402
Q505	125-0002-92	RN2402
Q506	125-0006-90	UN2110
Q701	192-2712-00	2SC2712
Q801	193-2118-00	2SD2118F5 Q,R,S
Q802	125-2004-92	RN1402
Q803	190-1150-00	2SA1150
Q804	125-2004-92	RN1402
Q805	125-0002-92	RN2402
Q808	131-1188-00	2SB1188
Q809	125-2004-96	RN1406
Q811	193-2118-00	2SD2118F5 Q,R,S
Q812	125-9003-92	IMD3
Q813	103-2012-00	2SD2012
Q903	103-2012-00	2SD2012
Q904	125-2004-92	RN1402
Q905	190-1298-00	2SA1298
Q906	125-2004-92	RN1402
Q907	125-2004-92	RN1402
R111	119-2221-15	1/10W 2.2k ohm
R112	119-4721-15	1/10W 4.7k ohm
R113	119-1021-15	1/10W 1k ohm
R114	111-4701-98	1/4W 47 ohm
R115	119-2221-15	1/10W 2.2k ohm
R116	111-1501-98	1/4W 15 ohm
R117	119-1021-15	1/10W 1k ohm
R118	119-4741-15	1/10W 470k ohm
R119	111-1001-98	1/4W 10 ohm
R120	111-2221-98	1/4W 2.2k ohm
R121	111-1031-98	1/4W 10k ohm
R122	119-1021-15	1/10W 1k ohm
R123	111-1031-98	1/4W 10k ohm
R124	111-2221-98	1/4W 2.2k ohm
R126	119-8201-15	1/10W 82 ohm
R199	119-0000-05	1/10W 0 ohm JW
R201	119-1021-15	1/10W 1k ohm
R202	119-1021-15	1/10W 1k ohm
R203	119-1031-15	1/10W 10k ohm
R204	119-0000-05	1/10W 0 ohm JW
R205	119-1031-15	1/10W 10k ohm
R206	119-4731-15	1/10W 47k ohm
R207	119-4731-15	1/10W 47k ohm
R208	119-4731-15	1/10W 47k ohm
R209	119-1041-15	1/10W 100k ohm
R210	119-1041-15	1/10W 100k ohm
R212	119-1031-15	1/10W 10k ohm
R214	119-2231-15	1/10W 22k ohm
R215	119-1031-15	1/10W 10k ohm
R221	119-1021-15	1/10W 1k ohm
R222	119-4731-15	1/10W 47k ohm
R223	119-1031-15	1/10W 10k ohm
R224	119-1021-15	1/10W 1k ohm
R225	119-1031-15	1/10W 10k ohm
R226	119-1021-15	1/10W 1k ohm
R227	119-4731-15	1/10W 47k ohm
R228	119-3311-15	1/10W 330 ohm
R229	119-3311-15	1/10W 330 ohm

REF No.	PART No.	DESCRIPTION
R230	119-1021-15	1/10W 1k ohm
R232	119-4731-15	1/10W 47k ohm
R234	119-1031-15	1/10W 10k ohm
R236	119-4731-15	1/10W 47k ohm
R239	119-1031-15	1/10W 10k ohm
R240	119-1021-15	1/10W 1k ohm
R241	119-1021-15	1/10W 1k ohm
R242	119-1021-15	1/10W 1k ohm
R245	119-1031-15	1/10W 10k ohm
R246	119-1031-15	1/10W 10k ohm
R248	119-1021-15	1/10W 1k ohm
R249	119-0000-05	1/10W 0 ohm JW
R250	119-1031-15	1/10W 10k ohm
R251	119-0000-05	1/10W 0 ohm JW
R252	119-0000-05	1/10W 0 ohm JW
R253	119-1031-15	1/10W 10k ohm
R254	119-1031-15	1/10W 10k ohm
R260	119-1031-15	1/10W 10k ohm
R301	119-1021-15	1/10W 1k ohm
R302	119-1021-15	1/10W 1k ohm
R303	119-4731-15	1/10W 47k ohm
R304	119-4721-15	1/10W 4.7k ohm
R305	119-1021-15	1/10W 1k ohm
R306	119-2231-15	1/10W 22k ohm
R307	119-0000-05	1/10W 0 ohm JW
R308	119-4731-15	1/10W 47k ohm
R309	119-4731-15	1/10W 47k ohm
R310	119-4731-15	1/10W 47k ohm
R311	119-4731-15	1/10W 47k ohm
R312	032-0140-63	1/10W 27k ohm F
R313	032-0140-63	1/10W 27k ohm F
R314	119-3011-15	1/10W 300 ohm
R334	119-1821-15	1/10W 1.8k ohm
R335	119-1821-15	1/10W 1.8k ohm
R336	119-3931-15	1/10W 39k ohm
R337	119-3931-15	1/10W 39k ohm
R342	119-4721-15	1/10W 4.7k ohm
R343	119-4721-15	1/10W 4.7k ohm
R346	119-4721-15	1/10W 4.7k ohm
R347	119-4721-15	1/10W 4.7k ohm
R360	119-0000-05	1/10W 0 ohm JW
R405	119-1021-15	1/10W 1k ohm
R406	119-5621-15	1/10W 5.6k ohm
R407	119-5621-15	1/10W 5.6k ohm
R408	119-5631-15	1/10W 56k ohm
R409	119-5631-15	1/10W 56k ohm
R410	119-1031-15	1/10W 10k ohm
R411	119-1031-15	1/10W 10k ohm
R412	119-5631-15	1/10W 56k ohm
R413	119-1031-15	1/10W 10k ohm
R414	119-3011-15	1/10W 300 ohm
R415	119-3011-15	1/10W 300 ohm
R416	119-4731-15	1/10W 47k ohm
R417	119-2231-15	1/10W 22k ohm
R422	119-4731-15	1/10W 47k ohm

REF No.	PART No.	DESCRIPTION
R430	032-0106-69	1/10W 39k ohm D
R431	032-0106-69	1/10W 39k ohm D
R432	032-0106-69	1/10W 39k ohm D
R433	032-0106-69	1/10W 39k ohm D
R501	119-3331-15	1/10W 33k ohm
R502	119-3331-15	1/10W 33k ohm
R503	119-3331-15	1/10W 33k ohm
R504	119-3331-15	1/10W 33k ohm
R505	119-1531-15	1/10W 15k ohm
R506	119-2731-15	1/10W 27k ohm
R507	119-1531-15	1/10W 15k ohm
R508	119-2731-15	1/10W 27k ohm
R509	119-1011-15	1/10W 100 ohm
R510	119-4721-15	1/10W 4.7k ohm
R511	119-1011-15	1/10W 100 ohm
R512	119-4721-15	1/10W 4.7k ohm
R513	119-4721-15	1/10W 4.7k ohm
R514	119-1031-15	1/10W 10k ohm
R515	119-1031-15	1/10W 10k ohm
R516	119-4721-15	1/10W 4.7k ohm
R518	119-2221-15	1/10W 2.2k ohm
R519	119-2221-15	1/10W 2.2k ohm
R521	119-4721-15	1/10W 4.7k ohm
R522	119-4721-15	1/10W 4.7k ohm
R523	119-1031-15	1/10W 10k ohm
R524	119-1031-15	1/10W 10k ohm
R525	119-2221-15	1/10W 2.2k ohm
R528	119-2221-15	1/10W 2.2k ohm
R529	119-2221-15	1/10W 2.2k ohm
R532	119-2221-15	1/10W 2.2k ohm
R573	119-4731-15	1/10W 47k ohm
R574	119-4731-15	1/10W 47k ohm
R575	119-8221-15	1/10W 8.2k ohm
R576	119-8221-15	1/10W 8.2k ohm
R577	119-1031-15	1/10W 10k ohm
R578	119-1031-15	1/10W 10k ohm
R579	119-5131-15	1/10W 51k ohm
R580	119-5131-15	1/10W 51k ohm
R581	119-5131-15	1/10W 51k ohm
R582	119-5131-15	1/10W 51k ohm
R583	119-1031-15	1/10W 10k ohm
R584	119-1031-15	1/10W 10k ohm
R585	119-1831-15	1/10W 18k ohm
R586	119-8221-15	1/10W 8.2k ohm
R587	119-8221-15	1/10W 8.2k ohm
R588	119-4731-15	1/10W 47k ohm
R589	119-4731-15	1/10W 47k ohm
R590	119-1031-15	1/10W 10k ohm
R591	119-1031-15	1/10W 10k ohm
R592	119-1031-15	1/10W 10k ohm
R593	119-1031-15	1/10W 10k ohm
R594	119-1031-15	1/10W 10k ohm
R595	119-1031-15	1/10W 10k ohm
R596	119-1031-15	1/10W 10k ohm
R597	119-1031-15	1/10W 10k ohm

REF No.	PART No.	DESCRIPTION
R598	119-1031-15	1/10W 10k ohm
R599	119-4721-15	1/10W 4.7k ohm
R600	119-1021-15	1/10W 1k ohm
R601	119-1021-15	1/10W 1k ohm
R602	119-1241-15	1/10W 120k ohm
R603	119-1241-15	1/10W 120k ohm
R604	119-1231-15	1/10W 12k ohm
R605	119-1231-15	1/10W 12k ohm
R606	119-2231-15	1/10W 22k ohm
R607	119-2231-15	1/10W 22k ohm
R612	119-1021-15	1/10W 1k ohm
R613	119-1021-15	1/10W 1k ohm
R615	119-1031-15	1/10W 10k ohm
R616	119-1031-15	1/10W 10k ohm
R617	119-4721-15	1/10W 4.7k ohm
R618	119-4721-15	1/10W 4.7k ohm
R619	119-4721-15	1/10W 4.7k ohm
R701	119-1031-15	1/10W 10k ohm
R702	119-5611-15	1/10W 560 ohm
R703	111-1531-98	1/4W 15k ohm
R704	116-4791-15	1/4W 4.7 ohm
R705	119-0000-05	1/10W 0 ohm JW
R708	116-2721-15	1/4W 2.7k ohm
R709	116-4791-15	1/4W 4.7 ohm
R803	111-4711-98	1/4W 470 ohm
R804	111-1021-98	1/4W 1k ohm
R805	119-2231-15	1/10W 22k ohm
R806	119-4731-15	1/10W 47k ohm
R810	116-1091-15	1/4W 1 ohm
R811	119-1031-15	1/10W 10k ohm
R812	116-1221-15	1/4W 1.2k ohm
R814	111-2211-98	1/4W 220 ohm
R815	119-1041-15	1/10W 100k ohm
R818	111-3911-98	1/4W 390 ohm
R819	119-1041-15	1/10W 100k ohm
R822	111-2211-98	1/4W 220 ohm
R833	111-3911-98	1/4W 390 ohm
R901	119-1031-15	1/10W 10k ohm
R902	119-1021-15	1/10W 1k ohm
R903	119-3931-15	1/10W 39k ohm
R904	119-3321-15	1/10W 3.3k ohm
R905	119-3321-15	1/10W 3.3k ohm
R906	119-4731-15	1/10W 47k ohm
R907	119-1841-15	1/10W 180k ohm
R908	119-4721-15	1/10W 4.7k ohm
R910	119-1031-15	1/10W 10k ohm
SUP101	060-0122-10	DSP-201M-S00B
TC201	004-1580-02	11pF
TH801	002-0229-90	PTH8L05B
TM101	073-0762-90	TERMINAL
TM801	073-0762-90	TERMINAL
VR102	012-5203-56	10k ohm
X201	061-3055-00	4.5MHz
PWB	039-2755-01	PWB(WITHOUT COMPONENT)

Switch PWB(B2) section

REF No.	PART No.	DESCRIPTION
C1101	166-8211-50	820pF
C1102	168-4732-78	0.047uF
C1103	168-4732-78	0.047uF
C1104	168-1042-78	16V 0.1uF
C1105	042-0416-59	10V33uF
CCT1101	050-0145-52	1/16W 1k ohm x4
CCT1102	050-0145-52	1/16W 1k ohm x4
D1100	001-7080-91	SML-512WWT864
D1101	001-7080-91	SML-512WWT864
D1102	001-7080-91	SML-512WWT864
D1103	001-7080-91	SML-512WWT864
D1104	001-7080-91	SML-512WWT864
D1105	001-7080-91	SML-512WWT864
D1106	001-7080-91	SML-512WWT864

REF No.	PART No.	DESCRIPTION
D1107	001-7080-91	SML-512WWT864
D1108	001-7080-91	SML-512WWT864
D1109	001-7080-91	SML-512WWT864
D1110	001-7080-91	SML-512WWT864
D1111	001-7080-91	SML-512WWT864
D1112	001-7080-91	SML-512WWT864
D1113	001-7080-91	SML-512WWT864
D1114	001-7093-90	RAY1112H-75M
D1115	001-7093-90	RAY1112H-75M
D1116	001-7093-90	RAY1112H-75M
D1117	001-7063-96	RAY1102W
D1118	001-7063-96	RAY1102W
D1119	001-7063-96	RAY1102W
D1120	001-7063-96	RAY1102W

REF No.	PART No.	DESCRIPTION
D1121	001-7063-96	RAY1102W
D1122	001-7063-96	RAY1102W
D1123	001-7063-96	RAY1102W
D1124	001-7063-96	RAY1102W
D1125	001-7063-96	RAY1102W
D1126	001-7063-96	RAY1102W
D1127	001-7063-96	RAY1102W
D1128	001-7063-96	RAY1102W
D1129	001-7063-96	RAY1102W
D1130	001-7063-96	RAY1102W
D1131	001-7063-96	RAY1102W
D1132	001-7063-96	RAY1102W
D1133	001-7063-96	RAY1102W
D1134	001-7063-96	RAY1102W

REF No.	PART No.	DESCRIPTION
D1135	001-7063-96	RAY1102W
D1136	001-7063-96	RAY1102W
D1137	001-7063-96	RAY1102W
D1138	001-7063-96	RAY1102W
D1139	001-7063-96	RAY1102W
IC1101	051-6064-00	LC75883W
J1102	074-3012-64	OUTLET SOCKET P14
LCD101	379-1247-30	LCD
R1101	119-6831-15	1/16W 68k ohm
R1102	116-2711-15	1/4W 270 ohm
R1103	116-2711-15	1/4W 270 ohm
R1104	116-2711-15	1/4W 270 ohm
R1105	116-2711-15	1/4W 270 ohm
R1106	116-2711-15	1/4W 270 ohm
R1107	116-2711-15	1/4W 270 ohm
R1108	116-2711-15	1/4W 270 ohm
R1109	116-4711-15	1/4W 470 ohm
R1110	116-3911-15	1/4W 390 ohm
R1111	116-5611-15	1/4W 560 ohm
R1112	116-3911-15	1/4W 390 ohm

REF No.	PART No.	DESCRIPTION
R1113	116-4711-15	1/4W 470 ohm
R1114	116-4711-15	1/4W 470 ohm
R1115	116-3911-15	1/4W 390 ohm
R1116	116-3911-15	1/4W 390 ohm
R1117	116-5611-15	1/4W 560 ohm
R1118	116-8211-15	1/4W 820 ohm
R1119	119-2221-15	1/10W 2.2k ohm
R1120	119-2221-15	1/10W 2.2k ohm
R1121	119-2221-15	1/10W 2.2k ohm
R1124	116-0000-05	1/4W 0 ohm
R1125	119-0000-05	1/10W 0 ohm JW
R1126	119-0000-05	1/10W 0 ohm JW
R1129	119-1021-15	1/10W 1k ohm
R1145	117-0000-05	1/8W 0 ohm JW
R1146	117-0000-05	1/8W 0 ohm JW
R1147	117-0000-05	1/8W 0 ohm JW
R1148	117-0000-05	1/8W 0 ohm JW
R1149	117-0000-05	1/8W 0 ohm JW
S1101	013-6311-50	SWITCH
S1103	013-6311-50	SWITCH
S1104	013-6311-50	SWITCH

REF No.	PART No.	DESCRIPTION
S1105	013-6311-50	SWITCH
S1106	013-6311-50	SWITCH
S1107	013-6311-50	SWITCH
S1108	013-6311-50	SWITCH
S1109	013-6311-50	SWITCH
S1110	013-6311-50	SWITCH
S1111	013-6311-50	SWITCH
S1112	013-6311-50	SWITCH
S1113	013-6311-50	SWITCH
S1114	013-6311-50	SWITCH
S1115	013-6311-50	SWITCH
S1116	013-6311-50	SWITCH
S1117	013-6311-50	SWITCH
S1118	013-6311-50	SWITCH
S1119	013-6311-50	SWITCH 100gf
S1121	013-6311-50	SWITCH 100gf
TM1104	073-0778-90	TERMINAL
VR1101	016-0013-04	ROTARY ENCODER
PWB	039-2754-01	PWB(WITHOUT COMPONENT)

Sub PWB(B3) section

REF No.	PART No.	DESCRIPTION
J1001	074-1013-30	12P
J1002	074-1298-10	8P

REF No.	PART No.	DESCRIPTION
P1001	076-0544-10	10P
P1002	076-0544-08	8P

REF No.	PART No.	DESCRIPTION
PWB	039-2756-00	PWB(WITHOUT COMPONENT)

CD PWB(B4) section:CD mechanism

REF No.	PART No.	DESCRIPTION
C101	168-1042-78	0.1uF
C102	045-4701-50	47pF
C103	046-4722-58	4700pF
C104	168-1042-78	0.1uF
C105	046-1532-78	0.015uF
C106	046-1032-78	0.01uF
C107	046-1032-78	0.01uF
C108	046-4722-58	4700pF
C109	046-1522-58	1500pF
C110	046-3332-78	0.033uF
C111	168-1042-78	0.1uF
C112	046-3332-78	0.033uF
C113	168-1042-78	0.1uF
C114	168-1042-78	0.1uF
C115	046-4712-58	470pF
C116	046-4712-58	470pF
C117	043-0533-50	0.047uF
C118	043-0533-50	0.047uF
C119	045-2701-50	27pF
C120	045-1801-50	18pF
C121	163-1063-35	16V10uF
C122	178-1052-78	1uF
C123	046-1032-78	0.01uF
C124	163-1073-05	4V100uF
C125	168-1042-78	0.1uF
C126	168-1042-78	0.1uF
C129	178-1052-78	1uF
C201	163-3363-05	4V33uF
C202	168-1042-78	0.1uF
C203	178-1052-78	1uF
C204	163-1073-05	4V100uF
C205	163-3363-05	4V33uF
C206	168-1042-78	0.1uF
C207	043-0533-50	0.047uF

REF No.	PART No.	DESCRIPTION
C208	046-6822-58	6800pF
C209	168-1042-78	0.1uF
C210	043-0533-50	0.047uF
C211	168-1042-78	0.1uF
C212	168-1042-78	0.1uF
C213	045-5096-50	5pF
C214	045-5601-50	56pF
C215	043-0533-50	0.047uF
C216	178-1052-78	1uF
C217	045-1011-50	100pF
C301	163-1073-35	16V100uF
C302	168-1042-78	0.1uF
C303	043-0533-50	0.047uF
D201	001-0516-90	MA111
IC101	051-6376-00	TC94A14FA
IC102	051-3279-90	BA033LBSG
IC201	051-5710-90	TA2157F
IC301	051-6049-08	BA5983FP-E2
J101	074-1228-76	26P
J201	074-1138-65	15P
J301	074-1138-60	10P
L101	010-2285-57	BLM21B102SPT
L102	010-2285-57	BLM21B102SPT
L103	010-2285-57	BLM21B102SPT
L104	010-2285-57	BLM21B102SPT
L105	010-2285-57	BLM21B102SPT
L401	010-2155-93	10uH
L401	010-3050-93	10uH
Q201	131-1188-50	2SB1188
R102	033-5621-15	1/16W 5.6k ohm
R104	033-4731-15	1/16W 47k ohm
R105	033-1041-15	1/16W 100k ohm
R108	033-1531-15	1/16W 15k ohm
R109	033-1031-15	1/16W 10k ohm

REF No.	PART No.	DESCRIPTION
R110	033-1051-15	1/16W 1M ohm
R111	033-3321-15	1/16W 3.3k ohm
R114	033-2211-15	1/16W 220 ohm
R115	033-2211-15	1/16W 220 ohm
R116	033-1031-15	1/16W 10k ohm
R117	033-1021-15	1/16W 1k ohm
R131	033-4711-15	1/16W 470 ohm
R132	033-2211-15	1/16W 220 ohm
R201	117-2201-15	1/10W 22 ohm
R202	117-2201-15	1/10W 22 ohm
R203	033-1041-15	1/16W 100k ohm
R204	033-1041-15	1/16W 100k ohm
R205	033-1641-15	1/16W 160k ohm
R206	033-1641-15	1/16W 160k ohm
R207	033-1041-15	1/16W 100k ohm
R208	033-8231-15	1/16W 82k ohm
R209	033-6811-15	1/16W 680 ohm
R210	033-6831-15	1/16W 68k ohm
R211	033-1831-15	1/16W 18k ohm
R212	033-2721-15	1/16W 2.7k ohm
R213	033-1011-15	1/16W 100 ohm
R214	033-1021-15	1/16W 1k ohm
R215	033-1031-15	1/16W 10k ohm
R217	033-1041-15	1/16W 100k ohm
R218	033-2211-15	1/16W 220 ohm
R301	117-6811-15	1/16W 680 ohm
R304	033-3921-15	1/16W 3.9k ohm
R305	033-3921-15	1/16W 3.9k ohm
R306	033-1041-15	1/16W 100k ohm
R307	033-2211-15	1/16W 220 ohm
X102	060-1528-90	16.934M
PWB	039-1945-20	PWB(WITHOUT COMPONENT)

SENSOR PWB(B5) section:CD mechanism

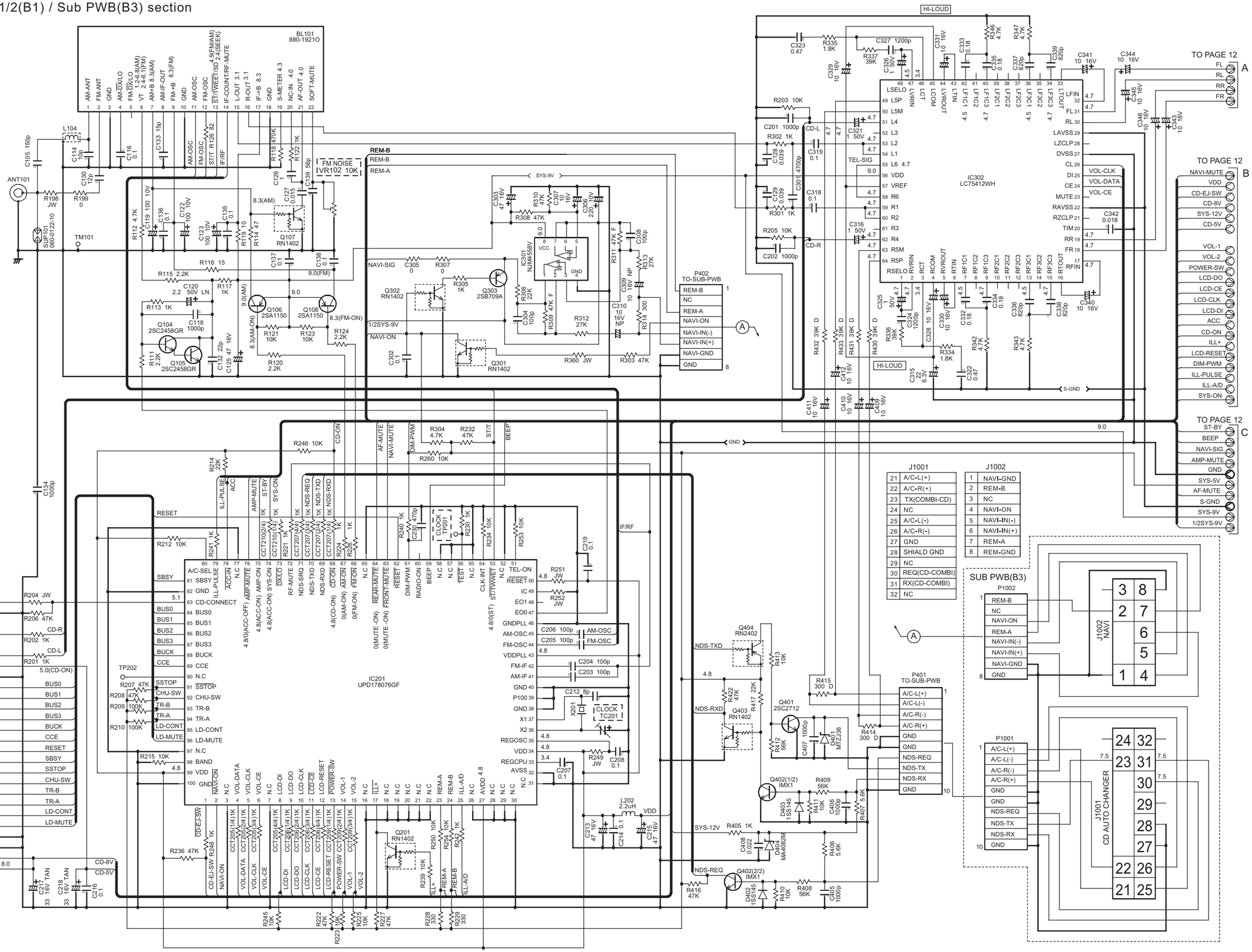
REF No.	PART No.	DESCRIPTION
D1	001-7058-90	AN1105W-RR
D2	001-7058-90	AN1105W-RR
J1	074-1138-60	10P

REF No.	PART No.	DESCRIPTION
Q1	060-4015-90	PS1192H
Q2	060-4015-90	PS1192H
S1	013-7414-50	CHUCKING

REF No.	PART No.	DESCRIPTION
S2	013-7413-50	LIMIT
PWB	039-1944-21	PWB(WITHOUT COMPONENT)

CIRCUIT DIAGRAM

Main PWB 1/2(B1) / Sub PWB(B3) section



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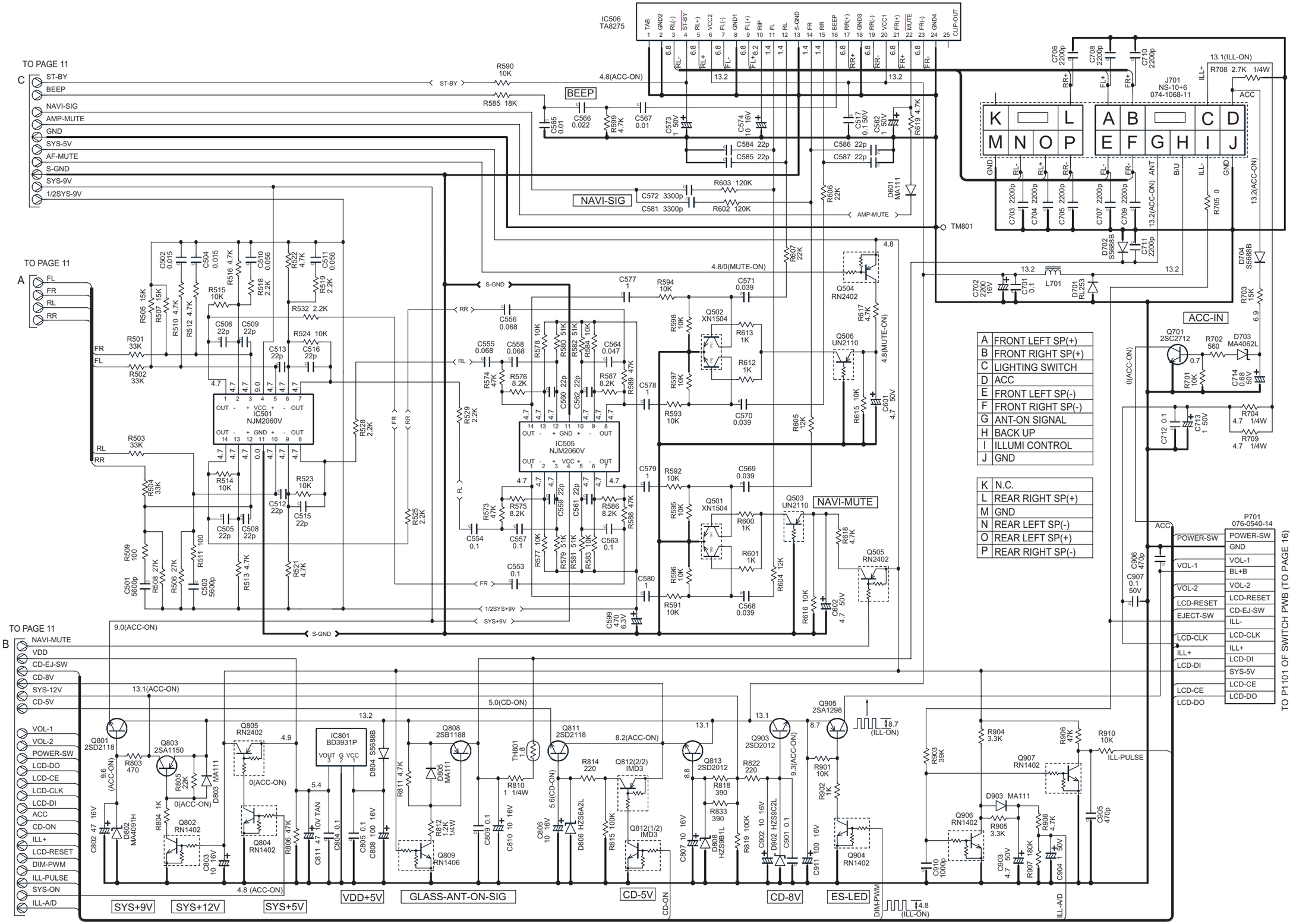
CIRCUIT DIAGRAM
Main PWB 2/2(B1) section



PRINTED WIRRING BOARD

Main PWB(B1) section / Sub PWB(B3) section

A	FRONT LEFT SP(+)
B	FRONT RIGHT SP(+)
C	LIGHTING SWITCH
D	ACC
E	FRONT LEFT SP(-)
F	FRONT RIGHT SP(-)
G	ANT-ON SIGNAL
H	BACK UP
I	LIIUMI CONTROL
J	GND

J I H G F E
D C B A
P O N M
L K

K	NC
L	REAR RIGHT SP(+)
M	GND
N	REAR LEFT SP(-)
O	REAR LEFT SP(+)
P	REAR RIGHT SP(-)

ANTENNA

SUB PWB (B3)

1	NAVI-GND
2	REM-B
3	NC
4	NAVI-ON
5	NAVI-IN(-)
6	NAVI-IN(+)
7	REM-A
8	REM-GND

21	A/C L(+)
22	A/C R(+)
23	NDS-TX
24	NC
25	A/C L(-)
26	A/C R(-)
27	GND
28	GND
29	NC
30	NDS-REQ
31	NDS-RX
32	NC

TP201
TC201
VR102

Caution:
COMPONENT SIDE: Parts on the component side seen from the component side are indicated.
SOLDER SIDE: Parts on the solder side seen from the solder side are indicated.

COMPONENT SIDE

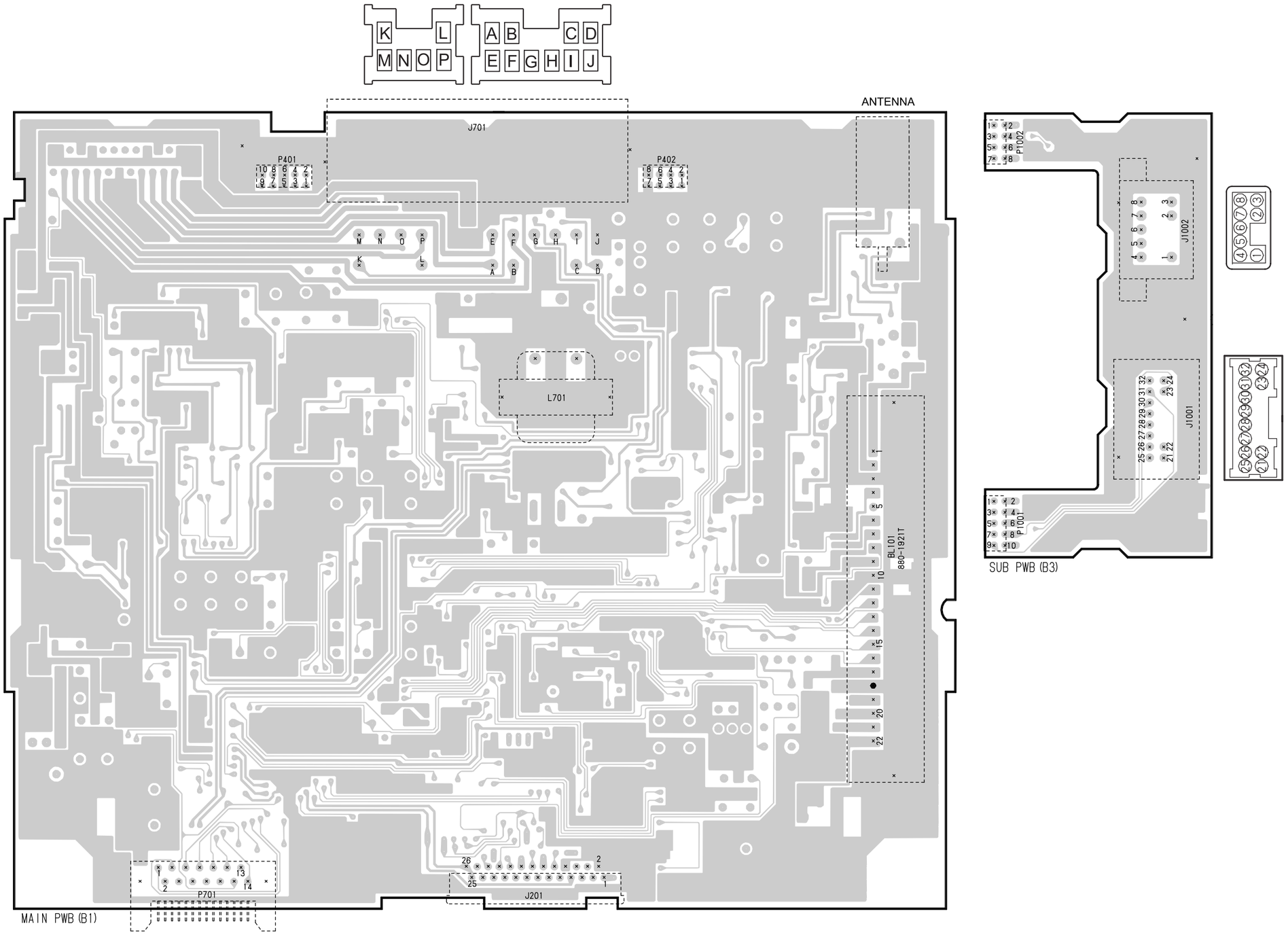
To J101 of CD MECHANISM page 18

To J1102 of SWITCH PWB page 15

MAIN PWB (B1)

IC	Q
IC506	
	Q501 Q502
	Q701 Q813
IC505	
	Q302 Q301 Q402 Q812
IC504 IC503	
	Q303 Q404 Q401 Q403 Q811
IC301	
IC501 IC801	Q809 Q503
	Q808 Q506
IC302	
	Q505 Q504 Q801
	Q106
IC201	Q108 Q105 Q805 Q104 Q804 Q803
	Q907 Q903 Q802
	Q107 Q201 Q904
	Q906 Q905

PRINTED WIRRING BOARD
Main PWB(B1) section / Sub PWB(B3) section

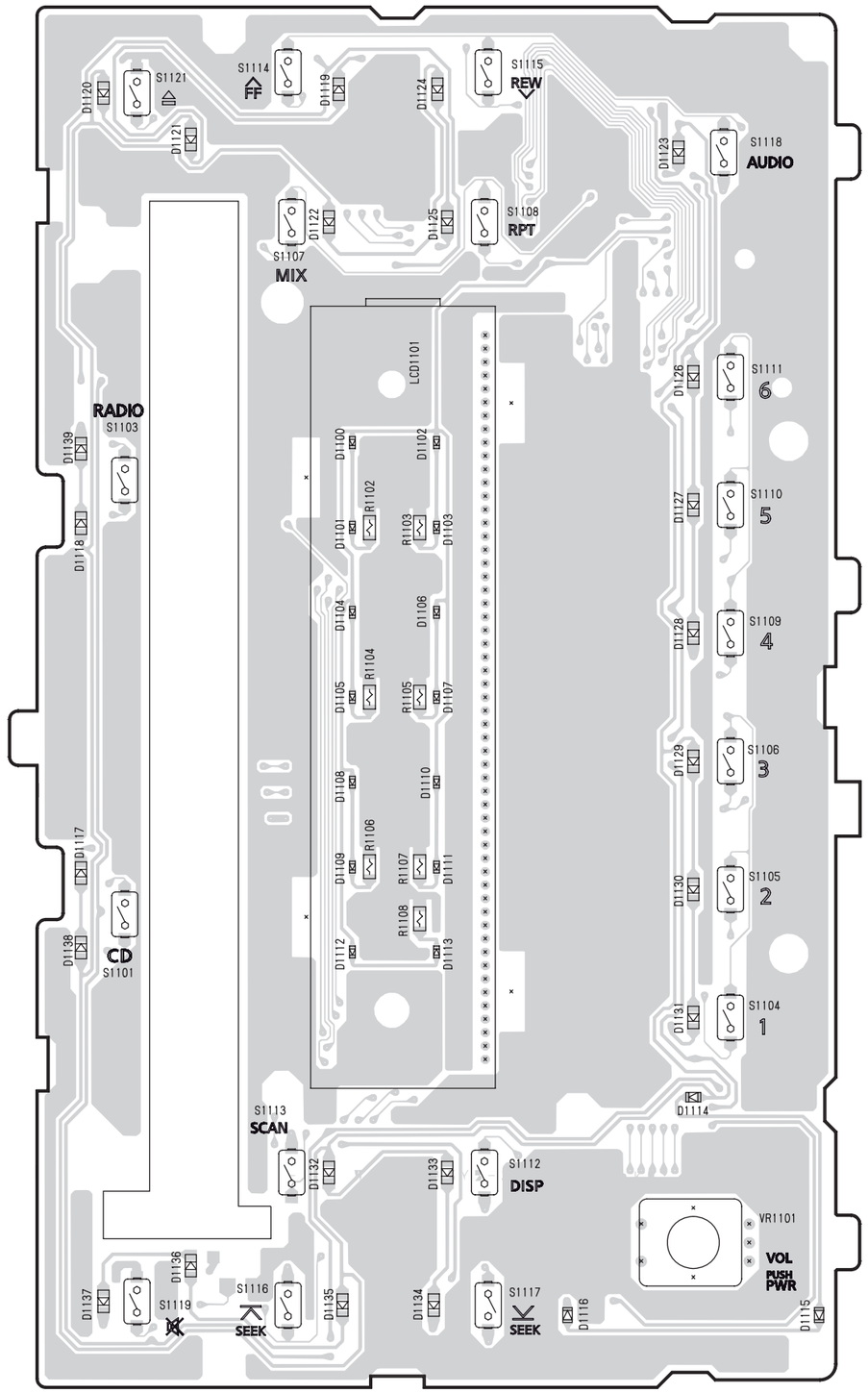


PRINTED WIRING BOARD

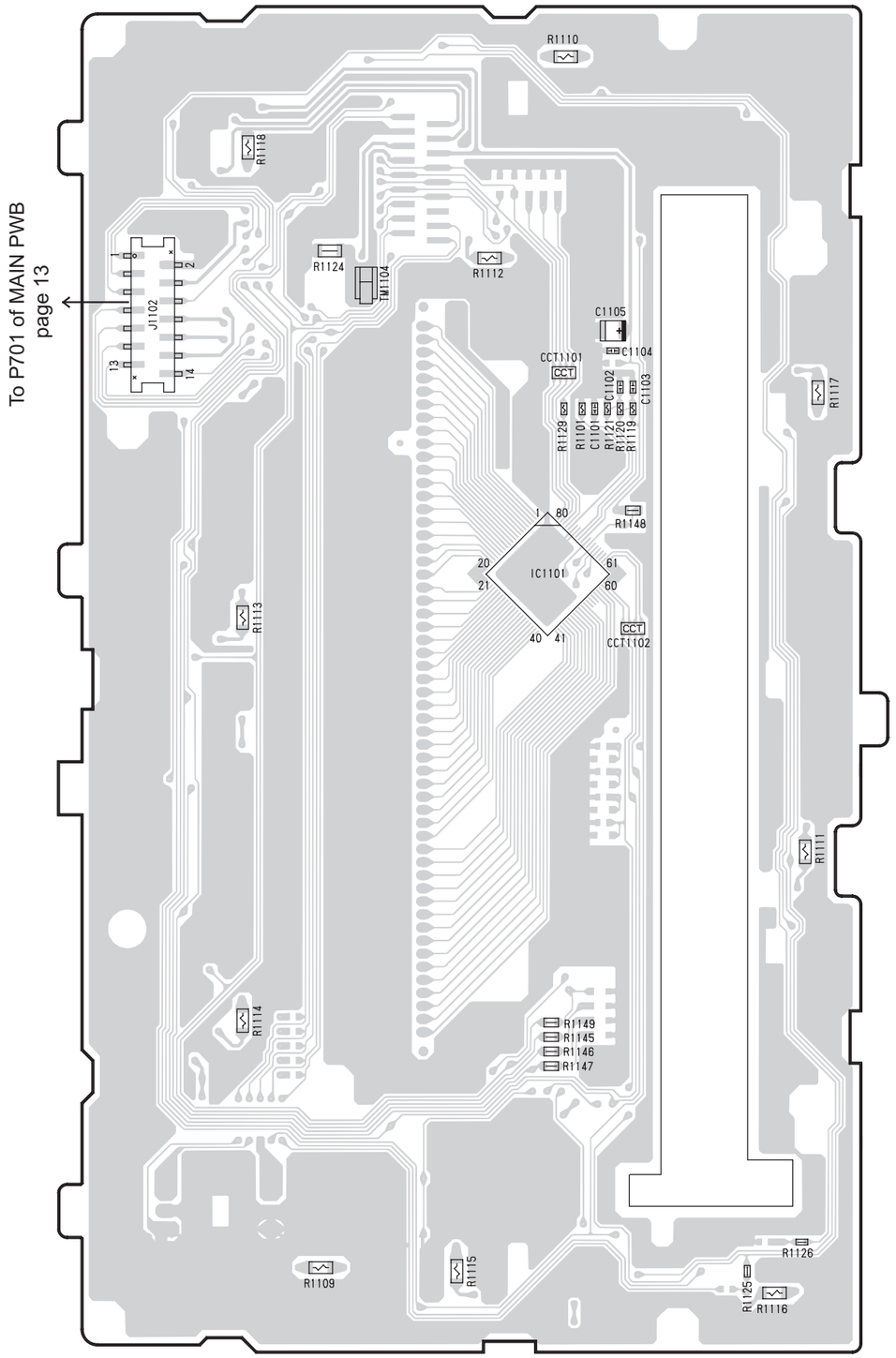
Switch PWB(B2) section

Caution:
COMPONENT SIDE: Parts on the component side seen from the component side are indicated.
SOLDER SIDE: Parts on the solder side seen from the solder side are indicated.

COMPONENT SIDE



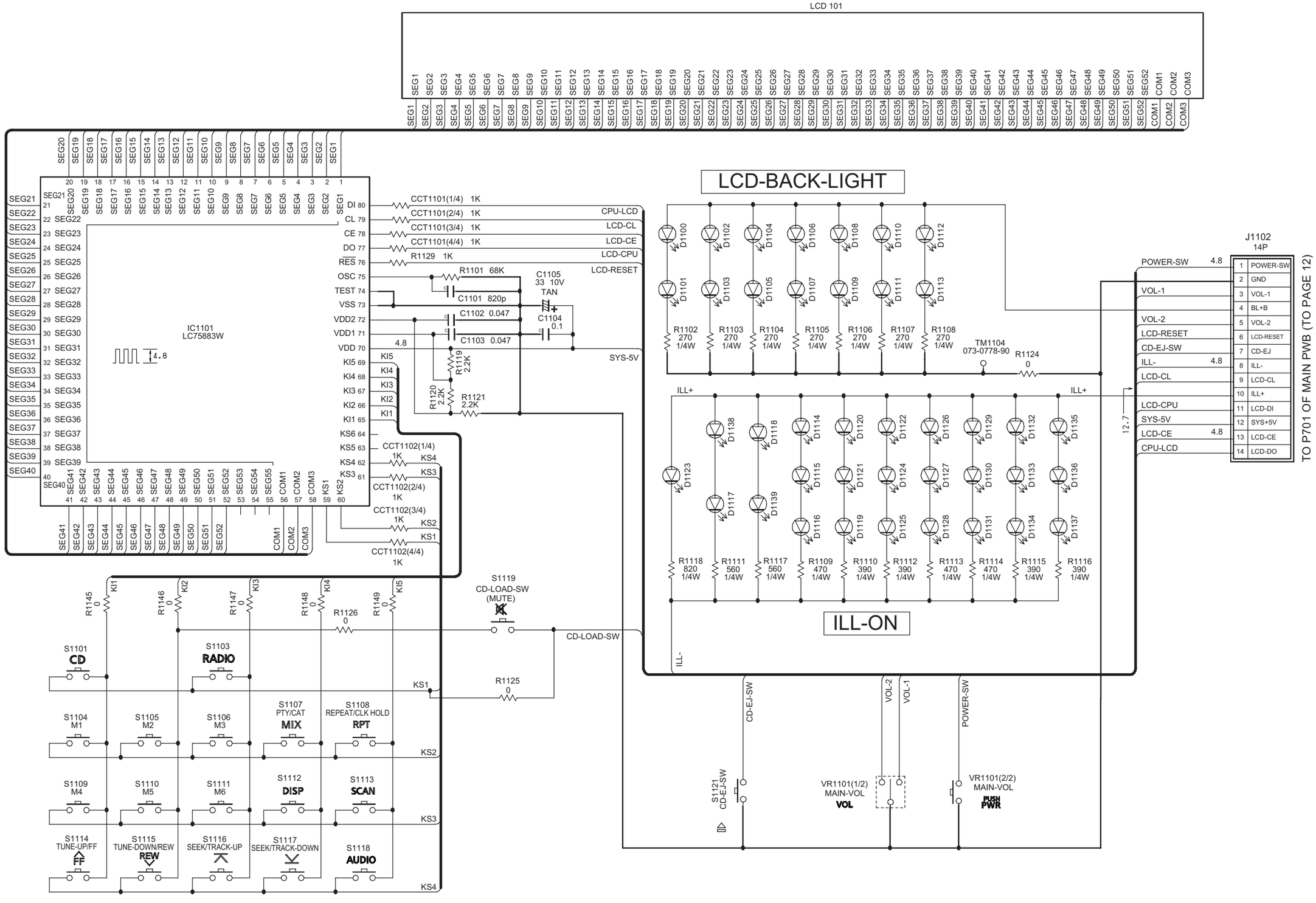
SOLDER SIDE



SWITCH PWB (B2)

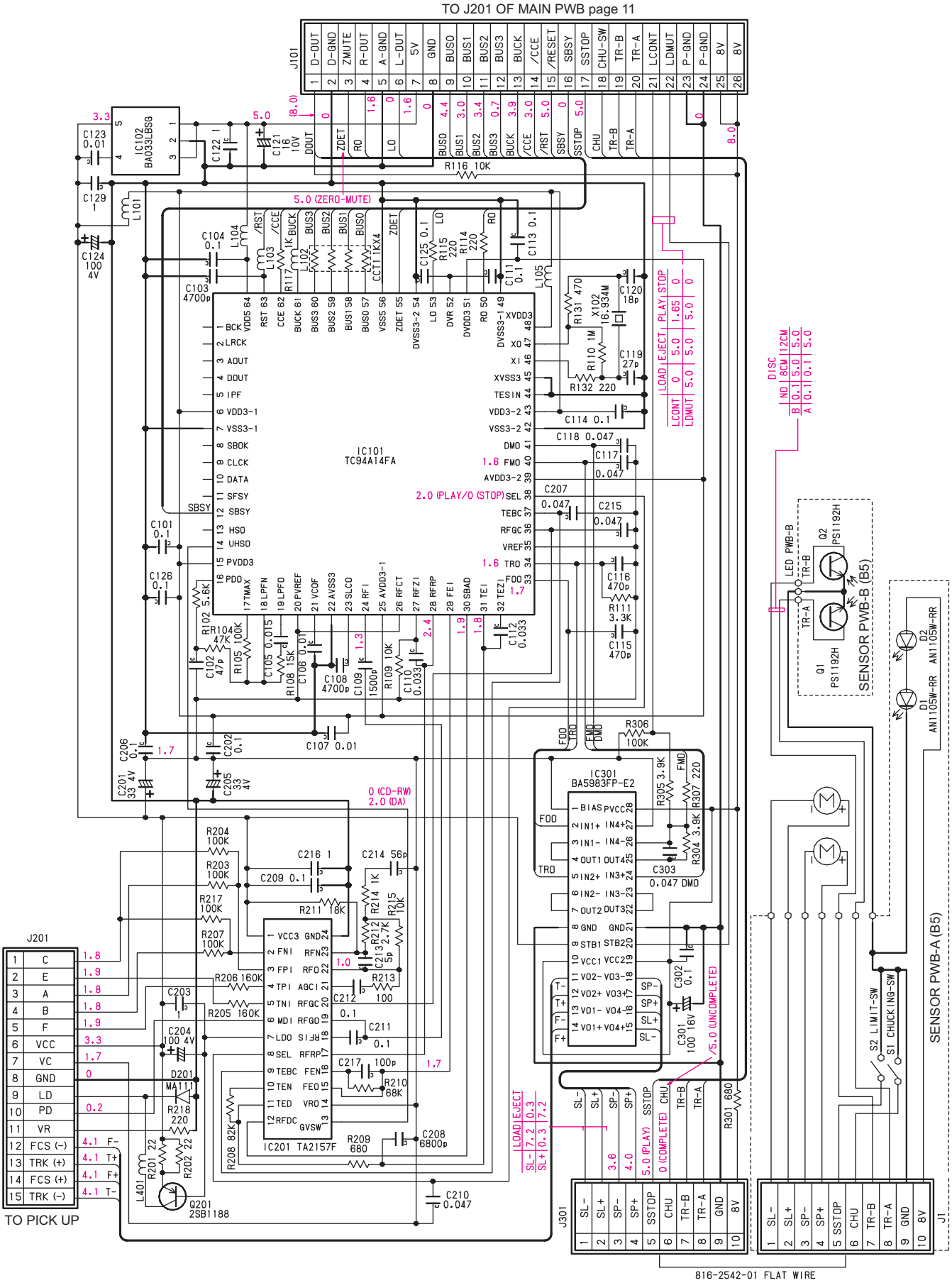
CIRCUIT DIAGRAM

Switch PWB(B2) section



CIRCUIT DIAGRAM

CD PWB(B4)/SENSOR PWB(B5) section



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PRINTED WIRING BOARD

CD PWB(B4)/SENSOR PWB(B5) section